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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,325	03/18/2004	Stephen R. Carsello	CE12004JDP	5567

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MOTOROLA, INC		
INTELLECTUAL PROPERTY SECTION		
LAW DEPT		
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EXAMINER
WANG, TED M

ART UNIT	PAPER NUMBER
2611	

MAIL DATE	DELIVERY MODE
10/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/803,325

Applicant(s)

CARSELLO ET AL.

Examiner

Ted M. Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 19-26 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7,13,14,16 and 18 is/are rejected.
- 7) ☒ Claim(s) 3,5,6,8-10,15 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed on 7/31/2007, with respect to Claims 1-11 and 13-26 under 35 USC 102(e) and 103(a) have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of US 6,269,088 and US 3,730,998.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 7, 13, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masui et al. (US 6,269,088) in view of Schmidt et al. (US 3,730,998).

- With regard claim 1, Masui et al. discloses an asynchronous communication system (column 1 lines 38-47) comprising the steps of:

generating a known preamble waveforms (Fig.5A element 31a and column 7 lines 16-27); and

transmitting at least one distinguishable preamble waveform among the set of known preamble waveforms based on an association with a call type (Fig.5

element 32a and column 7 lines 16-27) and a receiver identifier (Fig.5A element 34 and column 7 lines 16-27).

Masui et al. discloses all of the subject matter as described in the above paragraph except for specifically teaching generating a set of known preamble waveforms, wherein at least one preamble waveform is distinguishable from a remaining set of preamble waveforms among the set of known preamble waveforms.

However, Schmidt et al. teaches generating a set of known preamble waveforms, wherein at least one preamble waveform is distinguishable from a remaining set of preamble waveforms among the set of known preamble waveforms (Fig.2 element 210 and column 5 lines 20-38) in order to provide better clock and data recovery to improve the quality. Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the method as taught by Schmidt et al. described in the above paragraph into Masui's preamble generation circuit so as to improve the communication quality.

- With regard claim 4, Masui et al. further discloses the step in a receiver of calculating a correlation between a received signal and an undistorted version of a transmitted preamble waveform, for every known preamble waveform within the set (Fig.7 elements 70a, 70b and 70b' and column 8 lines 38-67).
- With regard claim 7, Masui et al. further discloses wherein the method further comprises the step of computing a measure of envelope variation for a received

envelope (Fig.7 elements 70a, 70b and 70b', where the matched filter output is the maximum peak or envelope).

- With regard claim 13, which is a system claim related to claim 1, all limitation is contained in claim 1. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 16, which is a system claim related to claim 4, all limitation is contained in claim 4. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 18, which is a device claim related to claim 1, Masui et al. further discloses a signal source (Fig.7, not shown, it delivers the source signal to coders 58a-58c, respectively), and a transmission apparatus (Fig.7 element 53) to transmit the preambles.

4. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masui et al. (US 6,269,088) and Schmidt et al. (US 3,730,998) as applied to claim 1 above, and further in view of Busching et al. (US 5,778,073).

- With regard claim 2, Masui et al. and Schmidt et al. disclose all subject matter as described in the above paragraph except for specifically teaching the step of forming a set of known, periodic, preamble waveforms using continuous-phase frequency-shift keying, modulated such that the signals toggle between two frequencies.

However, Busching et al., cited by Applicant, teaches the step of forming a set of known, periodic, preamble waveforms using continuous-phase frequency-

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shift keying, modulated such that the signals toggle between two frequencies (column 10 lines 43-65).

It is desired to include the step of forming a set of known, periodic, preamble waveforms using continuous-phase frequency-shift keying, modulated such that the signals toggle between two frequencies in order to reduce noise and bit error rate. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the method as taught by Busching et al. in which, having the step of forming a set of known, periodic, preamble waveforms using continuous-phase frequency-shift keying, modulated such that the signals toggle between two frequencies, so as to reduce noise and bit error rate.

- With regard claim 14, which is a system claim related to claim 2, all limitation is contained in claim 2. The explanation of all the limitation is already addressed in the above paragraph.

Allowable Subject Matter

5. Claims 11 and 19-26 are allowed.
6. Claims 3, 5, 6, 8-10, 15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is 571-272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ted M. Wang



Ted M Wang
Examiner
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